

REMARKS

The present application has been reviewed in light of the Office Actions dated January 8, 2009. Claims 26, 29, and 31-35 are presented for examination, of which Claims 26, 33, and 35 are in independent form. Claims 27, 28, and 30 have been cancelled, without prejudice or disclaimer of the subject matter presented therein. Claims 26, 29, and 31-35 have been amended to define aspects of Applicants' invention more clearly. Support for the claim amendments may be found, for example, in FIGS. 5, 7, 8B, 9, and 14 and the descriptions thereof in the specification. Favorable consideration is respectfully requested.

The Office Action states that Claim 31 is objected to because of informalities. In response, Claim 31 has been amended to replace the phrase "setting the portion" to "setting a portion," as suggested by the Examiner. Accordingly, withdrawal of the objection to Claim 31 is respectfully requested.

The Office Action states that Claims 26-32 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Federal Circuit recently held that to pass muster under Section 101 a process must either (1) be "tied to a particular machine or apparatus" or (2) "transform a particular article into a different thing or state." See *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008). Amended Claim 26 recites, *inter alia*, an "encoded data generation method . . . performed by a client apparatus including storage means for storing fragmentary first encoded data." The method of Claim 26 clearly is tied to a particular machine, *i.e.*, the client apparatus. Therefore, Applicants submit that the method of Claim 26 is patent eligible subject matter because it satisfies the first prong of the machine-or-transformation test.

In addition, the method of Claim 26 is patent eligible subject matter for the following additional reasons. Claim 26 recites, *inter alia*, “storing in the storage means the second encoded data acquired in the acquisition step.” A result of performing the method of Claim 26 is that a state of the client apparatus device is changed, by virtue of changing the data stored in the storage means. Therefore, Applicants submit that the method of Claim 26 also satisfies the second prong of the machine-or-transformation test. Moreover, the method of Claim 26 does not fall into a judicially created exception to 35 U.S.C. § 101, *i.e.*, the method of Claim 26 does not encompass a law of nature, a natural phenomenon, or an abstract idea.

Accordingly, withdrawal of the rejections under 35 U.S.C. § 101 is respectfully requested.

The Office Action states that Claims 28, 30, 33, and 34 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Cancellation of Claims 28 and 30 renders their rejections moot. Applicants have carefully reviewed and amended Claim 33, as deemed necessary, to ensure that it conforms fully to the requirements of Section 112, second paragraph, with special attention to the points raised in section 12 of the Office Action. It is believed that the rejections under Section 112, second paragraph, have been obviated, and their withdrawal is therefore respectfully requested.

The Office Action states that Claims 26-35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over a document entitled “HTTP Streaming of JPEG2000 Images,” IEEE, 2001, pages 15-19 (*Deshpande et al.*) in view of a document entitled “JPEG2000: Highly Scalable Image Compression,” IEEE, 2001, pages 268-272 (*Marcellin*

et al.). Cancellation of Claims 27, 28, and 30 renders their rejections moot. For at least the following reasons, Applicants submit that independent Claims 26, 33, and 35, together with the claims dependent therefrom, are patentably distinct from the cited prior art.

Notable features of Claim 26 are that a first determination is made to determine whether each of the tiles is a complete tile, which has each of its layers stored in the storage means, or an incomplete tile, which does not have all of its layers stored in the storage means, and that a second determination is made to determine whether the tiles that are determined to be complete tiles include data encoded in the Joint Photographic Experts Group (JPEG) 2000 format. Management information for managing each tile that is determined not to include data encoded in the JPEG2000 format is removed from the storage means. Data of each tile that is determined not to include data encoded in the JPEG2000 format is encoded in the JPEG2000 format. In addition, dummy data is encoded in the JPEG2000 format in place of layers of tiles that are determined to be incomplete tiles not stored in the storage means, and management information for managing each tile that is determined to be an incomplete tile is maintained in the storage means. By virtue of these features, high-speed decoding and display of image data can be performed using fragmentary encoded data that is cached in the client apparatus and fragmentary encoded data that is received, as needed, from the server apparatus, for example.^{1/}

Deshpande et al. is understood to relate to Hypertext Transfer Protocol (HTTP) streaming of JPEG2000 images using an index file. *Deshpande et al.* discusses that the

^{1/} Any examples presented herein are intended for illustrative purposes and are not to be construed to limit the scope of the claims.

index file records indexing information and can be generated by parsing codestream headers, which include a main header, tile-part headers and packet headers, to facilitate retrieval of particular portions of the codestream (*see* page 17, section 3). Nothing has been found in *Deshpande et al.* that is believed to teach or suggest the “first determination step,” the “second determination step,” the “removing step,” the “first encoding step,” and the “second encoding step” recited in Claim 26.

Marcellin et al. is understood to relate to a feature set of the JPEG2000 compression standard and a corresponding algorithm. *Marcellin et al.* discusses that an “empty packet” includes a packet header, but does not include packet data (*see* page 271). Nothing has been found in *Marcellin et al.* that is believed to teach or suggest the “first determination step,” the “second determination step,” the “removing step,” the “first encoding step,” and the “second encoding step” recited in Claim 26.

Applicants submit that *Deshpande et al.* and *Marcellin et al.*, whether considered separately or in a permissible combination (if any), fail to teach, suggest, or otherwise result in a method that includes “a first determination step of determining, whether each of the plurality of tiles is a complete tile, wherein each of the plurality of layers of the complete tile is stored in the storage means, or an incomplete tile, wherein at least one of the plurality of layers of the incomplete tile is not stored in the storage means,” “a second determination step of determining whether each tile determined to be the complete tile in the first determination step includes data encoded in the JPEG2000 format,” “a removing step of removing, from the storage means, management information for managing each tile determined in the second determination step not to include data

encoded in the JPEG2000 format,” “a first encoding step of encoding, in the JPEG2000 format, data of each tile determined in the second determination step not to include data encoded in the JPEG2000 format,” and “a second encoding step of encoding, in the JPEG2000 format, dummy data in place of layers that are not stored in the storage means for each tile determined in the first determination step to be the incomplete tile, and maintaining in the storage means management information for managing each tile determined in the first determination step to be the incomplete tile,” as recited in Claim 26. Accordingly, Applicants submit that Claim 26 is patentable over *Deshpande et al.* and *Marcellin et al.*, and respectfully request withdrawal of the rejection under 35 U.S.C. § 103(a).

Independent Claims 33 and 35 include features similar to those of Claim 26 and are believed to be patentable over *Deshpande et al.* and *Marcellin et al.* for at least the reasons discussed above. The other claims in the present application depend from Claim 26 or Claim 33 and are submitted to be patentable over *Deshpande et al.* and *Marcellin et al.* for at least the same reasons. Because each dependent claim also is deemed to define an additional aspect of the invention, individual consideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and an early passage to issue of the present application.

No petition to extend the time for responding to the Office Action is deemed necessary for the this Amendment. If, however, such a petition is required to make this

Amendment timely filed, then this paper should be considered such a petition and the Commissioner is authorized to charge the requisite petition fee to Deposit Account 06-1205.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

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